

Appendix H

RWSP Water Quality Protection Policies

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A. Explanatory materials. The water quality protection policies are intended to guide King County in identifying and resolving regional water quality issues, protecting public and environmental health and protecting the public's investment in wastewater facilities and water resource management. Research and analysis are required and will be used to evaluate water quality in county streams and other bodies of water within the service district.

Water Quality Protection Policies	How Implemented in 2004–2006
<p>WQPP-1: King County shall participate in identifying and resolving water quality issues pertaining to public health and ecosystem protection in the region to ensure that the public's investment in wastewater facilities and water resource management programs is protected.</p>	<p>King County monitors the waters and sediments near treatment plant and CSO outfalls to ensure compliance with water quality regulations to quickly identify and resolve water quality issues.</p> <p>King County's Trouble Call Program investigates water quality complaints, including wastewater overflows and leaks, in the county's wastewater service area. The program responded to about 110 incidents each year for the years 2004–2006. In 2004 and 2005, nine of the incidents were WTD-related. In 2006, 24 incidents were Wastewater Treatment Division (WTD)-related, primarily because of the Barton force main break and the December windstorm.</p> <p>The Department of Natural Resources and Parks (DNRP) is following the scientific and technical developments for emerging chemicals of concerns, such as endocrine disrupting chemicals (EDCs).</p>
<p>WQPP-2: King County shall evaluate the impacts and benefits of actions that affect the quality of the region's waters and identify measures to meet and maintain water quality standards.</p>	<p>WTD builds, operates, and maintains wastewater facilities to ensure the county meets and exceeds water quality regulations and standards, such as NPDES discharge limitations. In 2006, the West Point and South plants received the National Association of Clean Water Agencies (NACWA) Platinum Peak Performance Award for operating five consecutive years with no permit exceptions.</p> <p>The county's new treatment plants, Brightwater and Carnation, will use membrane bioreactor technology, which produces a higher quality effluent than effluent produced by typical secondary treatment processes. The use of this technology will help to ensure these plants meet or exceed stringent water quality standards for effluent discharge or reclaimed water production.</p>
<p>WQPP-3: King County shall forecast future aquatic resource conditions that may affect wastewater treatment decisions and work cooperatively to identify cost-effective alternatives to mitigate water quality problems and enhance regional water quality.</p>	<p>King County routinely monitors and models the condition of county water resources and uses information from these efforts and from other programs in the region to identify trends.</p> <p>In 2006, DNRP in partnership with Pacific Northwest National Laboratory completed an Integrated Water Resource Modeling System, which will be used to evaluate diverse water, land use, population, and climate change scenarios and to inform decisions on</p>

Water Quality Protection Policies	How Implemented in 2004–2006
<p>WQPP-4: King County shall participate with its regional partners to identify methods, plans and programs to enhance water quality and water resources in the region.</p>	<p>complex issues such as drinking water withdrawal from urban lakes, instream flows for fish, wastewater capital project planning, and discharge of reclaimed water on agricultural fields.</p> <p>In 2005, King County, in cooperation with other sponsors, held a climate change conference. Experts presented possible future effects of climate change on the region, including impacts on availability of water resources and on flood management. WTD will continue to monitor the growing information on climate change and sea-level rise and will accommodate this information in its plans as needed.</p> <p>The county works with other entities in the region on water quality monitoring and protection programs, including studies done in support of salmon conservation in the two major watersheds in the county.</p> <p>The county works with the Washington State Department of Ecology (Ecology) and local jurisdictions on developing and implementing Total Maximum Daily Loads for impaired surface waters and to develop a more coordinated ambient monitoring program. It also participates in the Puget Sound Partnership—a public/private group convened by the governor to develop an aggressive 15-year plan to solve Puget Sound’s most vexing problems—and works with University of Washington researchers to understand and plan for climate change. In addition, the county continues to participate in the Lower Duwamish Waterway Group on sediment clean up efforts.</p> <p>Since 2005, multiple agencies and organizations, including King County are participating in a regional water supply planning process for the purpose of identifying, compiling information on, and discussing many of the key issues that relate to or may affect water resources of the region.</p>
<p>WQPP-5: The King County executive shall implement a comprehensive water quality monitoring program of streams and water bodies that are or could be impacted by influent, effluent, sanitary system overflows or CSOs. The range of data to be gathered should be based on water pollutants and elements that scientific literature identifies as variables of concern, what is needed to substantiate the benefits of abating combined sewer overflows and what is required by state and federal agencies. The executive shall submit summary reports and comprehensive reviews of this information to the King County council as outlined in K.C.C. 28.86.165.</p> <p><i>(Ordinance 15384 amended this policy to include information and results of the water</i></p>	<p>A summary report on the county’s comprehensive water quality monitoring program is provided in the RWSP annual reports. The 2006 Water Quality Monitoring Report is provided in Appendix O of this report.</p>

Water Quality Protection Policies	How Implemented in 2004–2006
<i>quality monitoring program in RWSP annual reports instead of as a separate report.)</i>	
WQPP-6: King County shall implement and maintain water quality, monitoring, evaluating and reporting programs to support the national pollutant discharge elimination system for wastewater and other permit applications, and ensure permit compliance.	King County has ongoing monitoring programs that assess discharge quality for permit compliance. Ambient water and sediment quality monitoring provides background information and assists in identifying any adverse impacts from wastewater facilities. A summary of these programs is provided in Chapter 9 and in Appendix O.
WQPP-7: King County shall actively participate in the development of water quality laws, standards and program development to ensure cost-effective maintenance or enhancement of environmental and public health.	The county uses many opportunities to participate in the development of effective and reasonable regulations, both on its own and through professional organizations such as the National Association of Clean Water Agencies, Water Environment Federation, and Pacific Northwest Clean Water Association. The county participates in advisory groups, contributes technical information, and reviews and comments on proposals. County staff has also been participating in nationwide discussions on emerging chemicals of concerns, such as endocrine disrupting chemicals (EDCs).
WQPP-8: King County shall assess the risk to human health and the environment from wastewater treatment and conveyance activities, and use this information in evaluating water pollution abatement control options.	<p>The Lower Duwamish Waterway Work Group (City of Seattle, Port of Seattle, the Boeing Company, and King County) completed human and ecological risk assessments as part of Phase 2 remedial investigation studies for the Lower Duwamish Waterway Superfund cleanup project.</p> <p>King County completed a screening-level aquatic life risk assessment in 2005 for the Green River watershed as part of the Green-Duwamish Water Quality Assessment. WTD is using the results of the Green-Duwamish Water Quality Assessment in capital planning efforts, including planning for CSO control projects. The results are also contributing to salmon conservation planning and Ecology's Total Maximum Daily Load program.</p> <p>In addition, aquatic life, wildlife, and human health risk assessments in the greater Lake Washington watershed were completed in 2006.</p>